

## Gulf of Mexico Harmful Algal Bloom Bulletin

3 December 2007

NOAA Ocean Service NOAA Satellites and Information Service

Last bulletin: November 29, 2007

## **Conditions Report**

SW Florida: There is currently no harmful algal bloom along the southwest Florida coast. No impacts are expected today through Thursday, December 6.

NE Florida: A harmful algal bloom has been identified from southern Flagler to central Brevard County. In southern Flagler County, patchy very low impacts are possible today, Tuesday and Thursday, with no impacts expected on Wednesday. In northern Volusia County, patchy low impacts are possible today, Tuesday and Thursday, with patchy very low impacts possible Wednesday. In southern Volusia and central Brevard Counties, patchy moderate impacts are possible today, Tuesday and Thursday, with patchy very low impacts possible Wednesday. No other impacts are expected elsewhere along northeast Florida through Thursday, December 6.

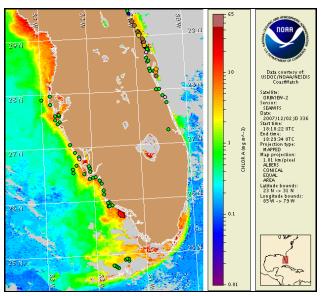
## Analysis

**SW Florida:** No *Karenia brevis* has been identified onshore southwest Florida, with the exception of background concentrations in southern Charlotte County on 11/27 (FWRI). Elevated chlorophyll continues to be visible south and southwest of Cape Romano, in particular at  $25^{\circ}39'13"N~81°49'6"W~(6\mu g/L)$  and alongshore northern Monroe County (> $10\mu g/L$ ). Cloudiness limits analysis of elevated chlorophyll noted in the last bulletin (11/29) located offshore of Monroe County near  $25^{\circ}26'56"N~81°26'51"W$  and the region north of Key West. In the latter region, the elevated chlorophyll has decreased overall with a maximum chlorophyll level of  $4\mu g/L$  ( $24^{\circ}59'2"N~82°12'19"W$ ). Sampling is recommended at all sited locations. Variable winds this week may maintain the locations of these features, with slight southward transport possible. These features will continue to be monitored via satellite imagery.

**NE Florida:** A harmful algal bloom persists from southern Flagler to central Brevard Counties. While imagery is obscured in Flager, southern Volusia and central Brevard Counties, overall chlorophyll levels have decreased in concentration (generally  $<3\,\mu g/L$ ) and extent since the 11/26 bulletin. Where visible, patches of elevated chlorophyl are located slightly offshore of southern Volusia ( $<10\,\mu g/L$ ; 29°0'34"N 80°49'55"N) and alongshore of the Volusia-Brevard County border ( $>10\,\mu g/L$ ). Continued sampling is recommended alongshore and offshore of these areas. Respiratory irritation and dead fish have been reported in Volusia County and dead fish have been reported in central Brevard County over the past few days. Strong onshore winds tonight may increase the potential

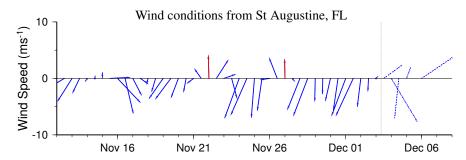
Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

for impacts. Variable winds, with primarily offshore components throughout the week, may decrease impacts. Fenstermacher, Urizar



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 25 to 29 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs\_bulletin\_guide.pdf



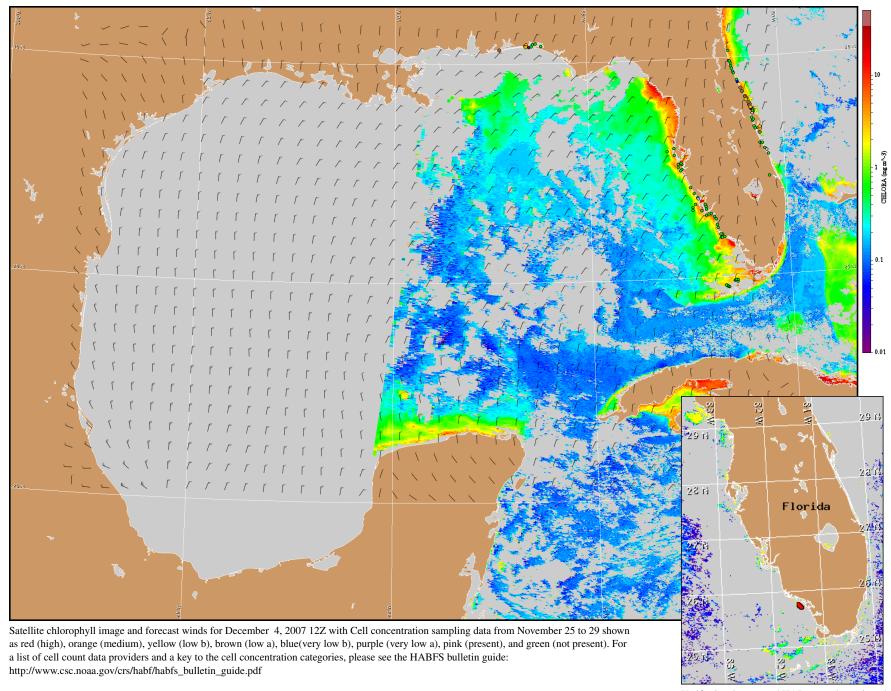
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: North to northwesterlies today and Tuesday followed by westerlies on Wednesday (5-10 kts; 3-5 m/s). Easterlies to southerlies on Thursday (5-10 knts; 3-5 m/s).

NE Florida: Varying north to westerlies today (10-20 kts; 5-10 m/s) and Tuesday (5-15 kts; 3-8 m/s) followed by westerlies on Wednesday (10-15 kts; 5-8 m/s). Northeasterlies to southerlies on Thursday (5-10 kts; 3-5 m/s).

Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.

Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

